

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number  
**WO 2005/083108 A1**

(51) International Patent Classification<sup>7</sup>: **C12Q 1/02**,  
C12N 1/20, 15/63, 15/09

(21) International Application Number:  
PCT/EP2005/002067

(22) International Filing Date: 26 February 2005 (26.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
04360019.6 26 February 2004 (26.02.2004) EP

(71) Applicant (for all designated States except US): **MIXIS FRANCE S.A.** [FR/FR]; 166 Boulevard du Montparnasse, F-75014 Paris (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **STROBEL, Heike** [DE/FR]; 22, rue Gramme, F-75015 Paris (FR). **SCHOENFELD, Wolfgang** [DE/AT]; Dirmhirn Gasse 37, A-1230 Wien (AT).

(74) Agents: **SCHRELL, Andreas** et al.; Gleiss Grosse Schrell & Partner, Leitzstrasse 45, 70469 Stuttgart (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: REDUCTION OF SPONTANEOUS MUTATION RATES IN CELLS

(57) Abstract: The present invention relates to processes for reducing the spontaneous mutation frequencies in cells or organisms and for producing such cells and organisms, to cells and/or organisms with reduced spontaneous mutation frequencies and to processes for the generation of expression systems for proteins, for the production of proteins and for the production of fermentation products by using cells with reduced spontaneous mutation frequencies.



WO 2005/083108 A1